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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/727,727

12/04/2003

Rainer Hoefer

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7177

23657 7590 01/10/2008  
COGNIS CORPORATION  
PATENT DEPARTMENT  
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EXAMINER

GRAY, JILL M

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

01/10/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/727,727	<b>Applicant(s)</b> HOEFER ET AL.	
	<b>Examiner</b> Jill M. Gray	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-6 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6 and 8-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 28, 2007 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 13-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, claim 13 is indefinite because the structural relationship of the synthetic fiber and reinforcing fiber is not clear. The claim preamble sets forth a "reinforced synthetic fiber" however it is not clear how the two components result in said reinforced synthetic fiber. Accordingly, the metes and bounds for which patent protection is being sought are not clear.

Claims 14 and 15 are indefinite because B1, B2 and B3 are not defined. Hence, these claims do not describe the subject matter defined by the invention with a reasonable degree of clarity and particularity.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 4-6, and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al., 5,633,042 (Nakamura) in view of Hoefer et al., US 2004/0087684 A1 (Hoefer), for reasons of record.

Claims 6, 8, 10, and 12 are product-by-process claims. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." MPEP 2113.

Nakamura teaches method of coating a glass substrate comprising providing a glass substrate, applying to the glass substrate a coating composition comprising a solventless bisphenolic epoxy and a hardener and curing the coating composition. The bisphenolic epoxy of Nakamura has a viscosity within the instant claimed range. See entire document, and for example, column 6, lines 10-20, and Examples. Nakamura does not specifically teach that the epoxy is the reaction product of epichlorohydrin and either bisphenol A or bisphenol F, or that the hardener is water-dilutable or that his composition contains water.

Hoefer '684 teaches coating compositions comprising an epoxy resin that is a reaction product of epichlorohydrin and a component selected from bisphenol A and

bisphenol F, a water-dilutable epoxy resin hardener and water. See abstracts. Hoefer '684 does not specifically teach a method of coating a glass substrate with said coating composition.

While Nakamura does not specifically teach that his epoxy is the reaction product of epichlorohydrin and either bisphenol A or bisphenol F, the fact that he teaches a bisphenolic epoxy would have provided a suggestion to the skilled artisan for the type of epoxy resin contemplated by applicants. Moreover, there is no clear showing on this record of criticality that is directly related to the instant epoxy resin. Accordingly, the compositions of Nakamura and Hoefer '684 are sufficiently close that one of ordinary skill in the art would immediately envisage substituting the compositions taught by Nakamura with one of those taught by Hoefer '684. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the method of coating a glass substrate as taught by Nakamura by using the compositions taught by Hoefer '684 with the reasonable expectation of success.

***Claim Rejections - 35 USC § 102***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 6, 8, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al., 5,633,042 (Nakamura), for reasons of record.

As set forth above, claims 6, 8, 10, and 12 are product-by-process claims. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a

product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." MPEP 2113.

Accordingly, the examiner has interpreted these claims to embrace the end product of a glass fiber coated with a cured epoxy resin.

Nakamura, as set forth above, teaches glass fiber substrates coated with a composition comprising bisphenolic epoxy resin and a hardener and curing said coated substrate to result in the end product of a glass fiber cloth coated with a cured epoxy resin. Hence, the teachings of Nakamura anticipate the invention as claimed in product-by-process claims 6, 8, 10 and 12. There is no evidence on this record of a patentably distinct end product from the prior art products.

### ***Response to Arguments***

8. Applicant's arguments filed November 28, 2007 have been fully considered but they are not persuasive.

Applicants argue that Nakamura is not pertinent to the invention and that there is neither teaching nor suggestion in Nakamura that the mixture of the epoxy resin and the hardener contain water or that such a mixture would be useful in the process, further arguing that Nakamura teaches away from the instant invention.

In this regard, the combined teachings of Nakamura and Hoefer would have rendered obvious the inclusion of water.

Applicants argue that Hoefer is completely silent concerning glass fibers coated with an epoxy resin and is directed to a composition containing only small amounts of the fibers whereas the coated glass fibers of the present invention would contain an amount greater than 10% by weight of the composition of the glass fiber and that since the amount of fibers present in the composition of Hoefer is relatively small, the composition should be considered an epoxy resin having imbedded therein synthetic fibers.

In this regard, it is the examiner's position that it would have been obvious to the skilled artisan during routine experimentation to modify the amount of fibers and composition for optimization purposes commensurate with the desired properties of the end product.

No claims are allowed.

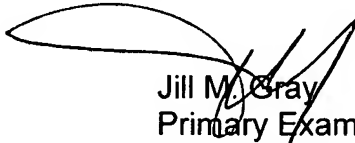
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jill M. Gray  
Primary Examiner  
Art Unit 1794

jmg